(II) Version with markings (underlines) to show changes made in SPECIFICATION and Claims:

SPECIFICATION:

page 5: line 11 " ..... pulse on corneal (changed to scleral) surface.... "
line 12 " ..... on the corneal (changed to scleral) plane....."
line 16 " ..... scanned over the corneal (changed to scleral) surface ...."
page 6: line 13 " ..... along the cornea (changed to sclera) radial direction ...."

CLAIMS:

1. A system (changed to method), adaptable for performing presbyopic correction in which a portion of the corneal (deleted) sclera tissue is removed by steps of :

(a) selecting a laser beam having a predetermined wavelength ;

(b) selecting a beam spot controller mechanism, said beam spot controller to reduce and focus said laser beam to a fiber delivery unit;
(c) controlling the said fiber delivery unit to deliver said laser beam in a said predetermined pattern onto a plurality of positions on the corneal (changed to scleral) surface to remove portion of the sclera tissue outside the limbus area, whereby a presbyopic patient's vision is corrected to see near and far (deleted) by increasing the accommodation of the lens (changed to eye).

2. A system (changed to method) of claim 1, wherein said laser beam is an ultraviolet laser having a wavelength range of about (0.15 - 0.36) microns and a pulse duration less than about 200 nenoseconds (changed to nanoseconds.)

3. A system (changed to method) of claim 1, wherein said laser beam is an infrared laser having a wavelength range of about (1.4 - 3.2) microns.

4. A system (changed to method) of claim 2 (changed to 3), wherein infrared laser is an optically pumped Erbium:YAG laser having a wavelength of about 2.9 microns.

5. A system (changed to method) of claim 1, wherein said laser beam is an ArF excimer laser having a wavelength of 193 nm.

6. A system (changed to method) of claim 1, wherein said laser beam is a XeCl excimer laser having a wavelength of 308 nm.

7. A system (changed to method) of claim 1, wherein said laser beam is a solid state diode laser having a wavelength range of about (0.95 – 2.1) microns (add) with a power higher than 2 Walt (changed to watts) and focused to a spot size less than 0.5 mm on the cornea (changed to sclera) surface.

8. A system (changed to method) of claim 1, in which said beam spot controller consists of at least one focusing spherical lens to couple the said laser beam to the said fiber delivery unit.

9. A system (changed to method) of claim 1, wherein said fiber delivery unit consists of an optical fiber having a length of about (0.5 - 1.5) meter and core diameter of about (0.2 - 0.8) mm and a hand piece connected to a fiber tip.

10. A system (changed to method) of claim 9, wherein said fiber delivery unit is substantially transparent to the wavelength of the said laser beam.

11. A system (changed to method) of claim 9, wherein said fiber tip is made of a similar material as that of the fiber and is made in one of the following shapes to focus the said laser beam onto the treated sclera area of the eye: conical, spherical, 90-degree reflecting angle and flat end.

12. A system (changed to method) of claim 9, wherein said fiber tip focuses the said laser beam onto the treated area of the eye at a spot size of about (0.1 - 0.5) mm in diameter.

13. A system (changed to method) of claim 9, wherein said fiber tip is made in a cylinder shape to focus the said laser beam onto the treated area of the eye at a line shape having a dimension of about (0.1 - 0.4) in width and (0.5 - 4.0) mm in length.

14. A system (changed to method) of claim 9, wherein said fiber tip is operated in a contact-mode to ablate the sclera tissue to a depth of about (300 - 800) microns.

15. A system (changed to method) of claim 9, wherein said fiber tip is operated in a non-contact mode to ablate the sclera tissue to a depth of about (300 - 800) microns.

16. A system (changed to method) of claim 1, wherein said fiber delivery unit is controlled by the surgeon to perform a predetermined patterns outside the limbus of the cornea by manually moving the fiber tip in the radial direction of the cornea.

17. A system (changed to method) of claim 1, wherein said fiber delivery unit is attached to a scanning device to perform said predetermined patterns outside the limbus of the cornea and scan said laser beam along the radial direction of the cornea.

18. A system (changed to method) of claim 1, wherein said predetermined patterns outside the limbus of the cornea defined by the area between two circles having radius of about 5.0 mm and 9.0 mm, respectively.

19. A system (changed to method) of claim 1, wherein said predetermined pattern includes at least 3 radial lines around the area outside the corneal limbus.

20. A system (changed to method) of claim 1, wherein said predetermined pattern includes at least two rings formed by 8 circular spots (changed to one ring formed by 3 circular spots) having a diameter of about (0.2 - 0.5) mm around the area outside the corneal limbus.

21. (deleted this Claim) A method of claim 1, wherein said sclera tissue is removed by said laser beam after the cornea conjunctiva is open.

22. (deleted this Claim) A method of claim 1, wherein said sclera tissue is removed by said laser beam without opening the cornea conjunctiva.